

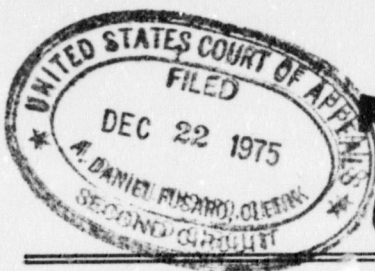
***United States Court of Appeals  
for the Second Circuit***



**APPELLANT'S  
BRIEF**







# 75-7514

IN THE  
**United States Court of Appeals**  
FOR THE SECOND CIRCUIT

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P/S

RANK A. QUINLAN,  
*Plaintiff-Appellee,*

vs.

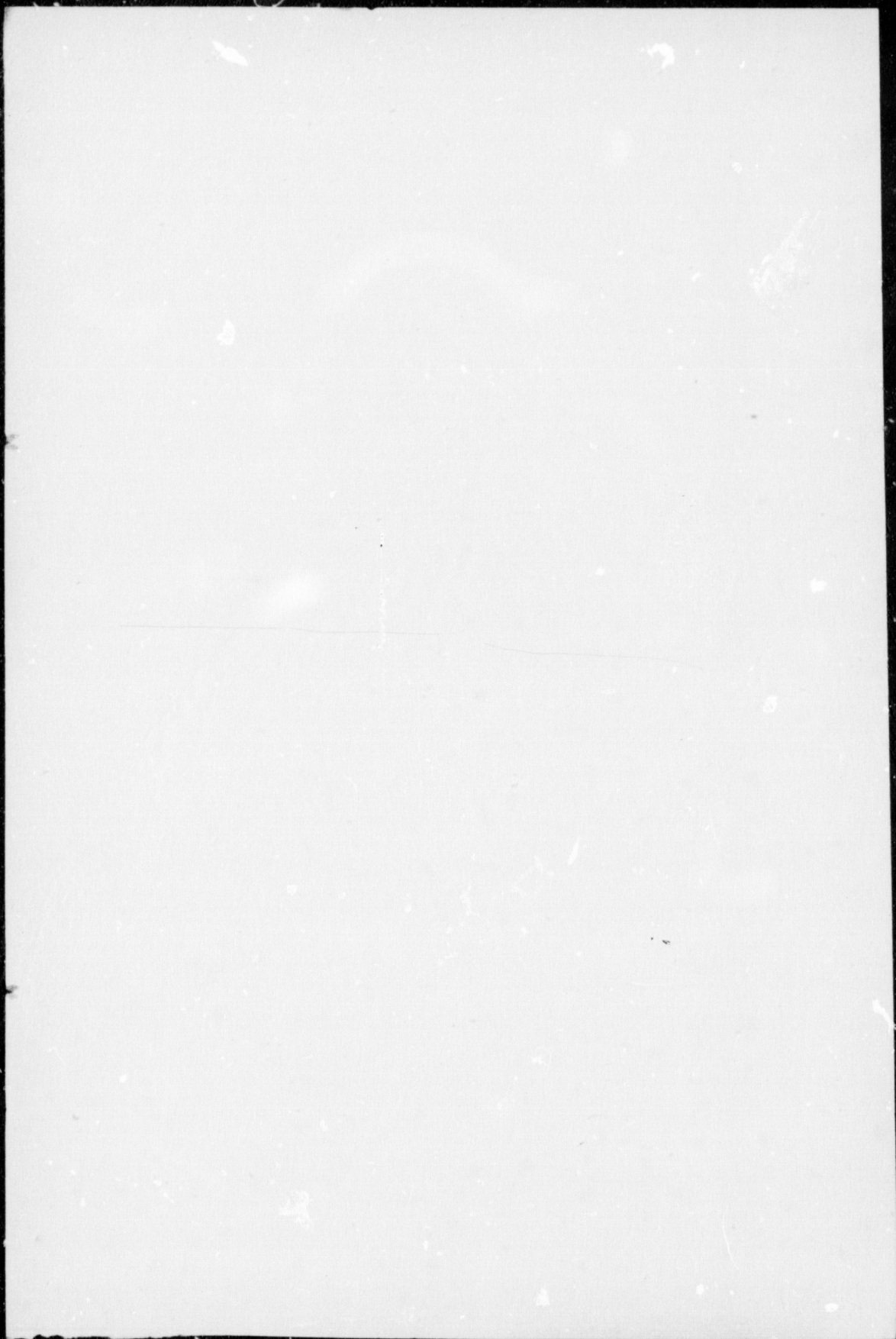
HILTI, INC.,  
*Defendant-Appellant.*

APPEAL FROM THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF VERMONT.

## BRIEF OF DEFENDANT-APPELLANT

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IN THE  
**United States Court of Appeals**

For the Second Circuit

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FRANK A. QUINLAN,  
*Plaintiff-Appellee,*

vs.

HILTI, INC.,  
*Defendant-Appellant.*

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Appeal from the United States District Court  
For the District of Vermont

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**BRIEF OF DEFENDANT-APPELLANT**

**Statement of the Case**

This is a so-called products liability action instituted by the Plaintiff-Appellee, Frank A. Quinlan, against the Defendant-Appellant, Hilti, Inc., by a Complaint dated July 19, 1973. The Complaint was filed in the United States District Court for the District of Vermont and carried the designation of Civil Action No. 73-197. The grounds of jurisdiction were diversity of citizenship and damages exceeding \$10,000.00.

The case was tried in Brattleboro, Vermont, before the Honorable James S. Holden and jury of six on July 7-14, 1975. The case was tried and subsequently committed to the jury on two issues: First, the issue was submitted on

the question of whether the products sold by the Defendant, Hilti, Inc., were defective for failure to adequately warn. The second, and only other issue submitted to the jury, was the issue of whether the Defendant, Hilti, Inc., was negligent, again, for failure to warn. Special Interrogatories on these points were submitted to the jury.

The jury found in its verdict that the Defendant's products were not defective for failure to warn, however, the jury found that the Defendant was negligent for failure to warn and returned a verdict for the Plaintiff in the amount of \$50,000.00. Judgment was entered on this verdict on July 14, 1975.

A Motion to direct a verdict in favor of the Defendant on the grounds that the Plaintiff had failed to produce sufficient evidence was made and rejected at the close of the Plaintiff's case. Motions for Judgment Notwithstanding the Verdict and For a New Trial were seasonably made by the defense and heard by the Court on August 7, 1975. Arguments were made by the Defendant that the Plaintiff had produced no evidence which would sustain a verdict for negligence and that the verdict was against the weight of the evidence. Further, argument was made that the Plaintiff's expert, Dr. Richard W. McLay, a professor of engineering, was wrongfully permitted, over objection, to state his opinion on certain points prejudicial to the Defendant. Argument was also made that the verdict of the jury was fatally inconsistent and defective. At the conclusion of oral argument on these Motions, the Court, ruled, from the bench, against the Defendant. Notice of Appeal was filed on August 12, 1975, with this Court.

Defendant appeals from the Orders of the Court below denying its Post-Verdict Motions and from rulings of evidence denying Defendant's objections to testimony offered by the Plaintiff's expert.



### Issues

1. Was the verdict of the jury which found for the Defendant on the issue of whether its products were defective, for failure to warn, and against the Defendant on the issue of negligent failure to warn, inconsistent and fatally defective?

2. Did the testimony of the Plaintiff's expert witness exceed the bounds permitted by law?

3. Was the verdict for the Plaintiff and against the Defendant on the issue of negligent failure to warn against the weight of the evidence?

### Statement of Facts

The Plaintiff, Mr. Frank A. Quinlan, is a resident of the State of Vermont. Quinlan was involved in a construction accident which occurred on Monday, July 20, 1970, on a construction project located on the campus of the University of Vermont in Burlington, Vermont (T. 23, 318—A. 42, 279). At the time of this accident, Quinlan had been employed as an industrial electrician's helper for somewhat less than one month by Philip Renzi and Son, Inc., an electrical contracting firm (T. 317—A. 278). Upon the trial of the case, Quinlan alleged that he received a knee injury as a result of a fall caused by the failure of a construction fastener sold by Hilti, Inc., to his employer, Philip Renzi.

The Defendant-Appellant, Hilti, Inc., is engaged in marketing various lines of construction tools and construction fasteners throughout the United States. The Company's line of products are divisible into two major

categories, that is, a line of concrete drilling and anchoring tools and applicable fasteners, and, also a line of powder actuated fastening tools and a wide variety of fasteners and adaptors to be used in conjunction with the powder actuated system (T. 484—A. 384; D. Ex. K). It is this second line, that is, the powder actuated tools and accompanying fasteners and accessories that were involved in the proceedings below.

The Hilti powder actuated tool is designed to insert a construction fastener into dense materials such as steel or concrete (T. 485—A. 385). The Hilti powder actuated tool is operated by the use of a small caliber explosive cartridge which is inserted in the rear end of the tool (T. 51—A. 70). The tool is designed to accept and hold a concrete or steel fastener at the fore-end until the operator is ready to discharge the cartridge (T. 52—A. 71). The fore-end of the tool, with the construction fastener in place, is then directed to and placed on the fastening surface in an appropriate location and the cartridge is discharged (T. 53—A. 72). The discharge of the cartridge forces an internal piston to move forward in the inner cylinder of the tool from a zero velocity to the speed of 300 feet per second. The fore-end of this piston forms the seat for the fastener, and, as the piston moves forward in the internal cylinder of the tool, the fastener also pushes forward and is thereby seated in the work surface (T. 432—A. 344). The tool is then withdrawn from the steel or concrete work surface leaving the fastener in place. The process is repeated as such for each fastener to be installed on the work surface (T. 53—A. 72).

Hilti markets its tools, fasteners and accessories by the means of field representatives who make personal calls on construction sites. The representative is equipped with a van which contains a stock of tools and fasteners for



direct sale to customers at the job site (T. 485—A. 385). The Company representatives are also trained to train line workers in the construction industry in the operation of Hilti tools. The Company representatives may issue cards to such persons indicating that they have been trained in the use of Hilti equipment. The representative may also issue application bulletins which depict some suggested uses of the product line by the Company (T. 485—A. 385). The representative is also available to discuss any questions concerning the Company products or the applications thereof as may be raised by its customers in the field (T. 487—A. 387). In the event of any special problems, the Company provides engineering services available to customers should the same be requested (T. 486—A. 386). The availability of such Company services are depicted in the Company literature which accompanies its tools (T. 429—A. 341).

Hilti fasteners for use in the powder actuated line are used extensively in the construction industry in an extremely wide variety of ways (T. 108-110—A. 119-121). In the sixteen years that Hilti has done business in the United States approximately one-half billion of such fasteners have been sold in the construction industry (T. 492-493—A. 392-393). While the size and shape of the fasteners in the line vary somewhat in configuration, their general nature is depicted by the fastener involved here. Such fasteners are small, short and slender. The tip is pointed so as to permit penetration into a hard work surface. They have a rear shank which is usually threaded and remains exposed and perpendicular to the work surface after installation. The exposed threaded portion makes possible the attachment of nuts, adaptors or other threaded devices (P. Ex. 1). It is necessary, of course, that the fastener be composed of a material harder than dense

work surfaces such as concrete or steel, as, it must penetrate these materials in order to be effective (T. 210—A. 186). There is no significant difference between the steel and concrete fasteners marketed by Hilti except some slight variation in configuration. In actual fact, both concrete and steel fasteners are made of the same material and are virtually interchangeable for all practical purposes (T. 490-491—A. 390-391).

As can readily be seen such fasteners have a wide potential variety of uses in the construction industry. As was conceded by the Plaintiff's expert, such fasteners may be used in a virtual host of both proper and improper ways (T. 218—A. 191). The fasteners are very similar in concept and general use possibilities to the common bolt (T. 459-460—A. 369-370).

Hilti also sells multi-purpose coupling adaptors which may be attached to the threaded fastener shank and used to couple the fastener to another threaded object such as a bolt or a rod (T. 283—A. 246). Such fasteners and adaptors, used together, also have an extremely wide variety of potential applications in the construction industry (T. 200—A. 183).

At all times relevant to the case, Theodore Smith was the sales representative of Hilti in the State of Vermont. Smith began this position in approximately March-April, 1970 (T. 406—A. 319). Previous to beginning his own work in Vermont, Mr. Smith trained, on the job, for a week with his superior (T. 407—A. 320). At all times relevant to the case, Mr. Hans Huva was the general construction superintendent for Philip Renzi and Son, the injured party's employer.

The evidence in the record shows that Huva contacted Smith in June of 1970 to make a purchase of construction

fasteners (T. 397-399—A. 310-312). The evidence also shows that the injured party's employer was a frequent customer of Hilti and had already used the Hilti powder actuated tools and fasteners extensively on this and other jobs (T. 108-111, 398—A. 119-122, 311). Indeed, Smith was only called by Huva to replenish the supply of fasteners at the job site. Renzi was using the Hilti tools previous to his involvement. Huva testified that, before the transaction in question, he previously had used Hilti fasteners in a "normal way" in concrete, and, occasionally in steel (T. 311—A. 272).

The record also shows that Huva contacted Smith and asked him to call upon him at the job site. This resulted in an on-the-job visit by Smith and the sales transaction which occurred on July 15, 1970 (T. 99, 398—A. 110, 311). At this meeting, Huva first purchased several boxes of concrete fasteners. Huva did not ask Smith any questions or seek any advice concerning the nature or uses of the concrete fasteners (T. 399—A. 312). Huva then asked Smith if he had fasteners for steel and was advised in the affirmative (T. 100, 400—A. 111, 313). Smith advised Huva that the steel fastener was similar to the concrete fastener but somewhat shorter (T. 401—A. 314). Huva asked to see certain specifications depicting the load carrying capacity of the steel fasteners. Smith and Huva then reviewed Hilti specifications which showed that the EW6 1/4th inch shank steel fastener would hold to 2322 pounds in the tension mode and 2819 pounds in the shear mode.<sup>1</sup>

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<sup>1</sup> Tension is the stationary weight the fastener will hold if the weight is placed directly under the direction of the fastener. Shear is the weight the fastener will hold if the weight is placed perpendicular to or across the direction of the fastener. A steel plate fastened to an overhead concrete ceiling by the four corners would demonstrate the tension mode. The same plate, fastened in the same manner to a concrete wall would be in the shear mode (T. 122-123—A. 133-134).



At the time of the purchase, Huva asked nothing further of Smith. Huva did not advise Smith of the use to which he intended to put the product (T. 130—A. 141). Huva was aware that the company provided technical and application advice, however, Huva did not seek assistance of any kind (T. 131—A. 142). Smith similarly testified that Huva asked him nothing other than the load carrying capacity of the fastener and that Huva did not indicate the use to which he intended to put the products (T. 401—A. 314). Smith testified that his only knowledge was that Huva intended to fasten a stationary object to steel by use of this fastener and possible conjunction with the adaptor (T. 412-418, 426—A. 325, 330, 338). No more than this was communicated to Hilti or its representative.

As subsequent events have shown, Huva, on his sole initiative, designed a system, using Hilti fasteners and adaptors, to suspend electrical conduit from steel beams (T. 102—A. 113).

Huva, as previously indicated, was the general superintendent of the injured party's employer (T. 96—A.107). As such, Huva was responsible for the general progress and orderly flow of the electrical work on the project (T. 106-107—A.117-118). Just previous to and directly related to the accident, Huva was in a situation where he had to schedule the installation of heavy duty electrical conduit from over-head steel beams. The conduit was on the floor in the area and had to be installed at once (T. 114-115—A.125-126). The conduits involved were essentially ten foot lengths of three inch diameter rigid steel pipe capable of being joined in succession by threaded couplings into larger sections. Each separate ten foot section weighed approximately 75 pounds (T. 30, 323—A.49, 284). Huva sought to suspend some 60 feet of this pipe (T. 136—A.147).

To suspend the pipe, Huva devised a system consisting of a series of "trapezes" attached to overhead beams into which he intended to place the pipe. Each individual trapeze was to be constructed as follows: First, two Hiiti steel fasteners were to be placed in the beam approximately eight inches apart. One-quarter inch to three-eighth inch adaptors were then to be threaded onto the exposed one-quarter inch shank of the fastener. An eight inch section of three-eighth of an inch threaded rod was then to be threaded into the adaptor so that each rod suspended directly down from and perfectly perpendicular to the steel beams. A cross-member of common construction strut was then bolted across the bottom of each rod to form a hanger with a trapeze-like appearance (T. 33-39, 102—A. 52-58, 113).

The salient resulting characteristic of the "trapeze" system thus designed by Huva was its stiffness. Each member of the trapeze was rigidly connected to the next so that any force or movement applied to the cross-member would be transmitted up the three-eighth inch rod to the shank of the fastener, a hard steel shank only one-eighth of an inch in diameter. Any lateral force placed on or against the cross-member would result in the transmission of a bending force to the one-sixth of an inch shank of the fastener which is held immovably in the steel beam<sup>2</sup> (T. 246-250—A. 217-221). Again, the trapeze hanger was designed by Huva alone. His intent to use Hilti's products in this manner were never communicated to Hilti or its agents.

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<sup>2</sup> It was properly pointed out by a defense expert that the word "trapeze" used to describe the hanger system is a substantial misnomer as a true trapeze is free to move. The system designed by Mr. Huva was characteristically unable to move and was described in fact as a trapeze frozen in one place (T. 458-459—A. 368-369). The word trapeze, therefore, is only visually and not characteristically accurate.

Huva passed on his instructions to hang the conduit through normal job channels and they were ultimately transmitted to Quinlan and Clement Vallieres, a co-worker and master electrician of thirty years experience (T. 23, 29—A.42, 48). Mr. Vallieres had previously been trained in the use of the Hilti equipment and held a Hilti license (T. 54—A.73). Upon receiving the instructions to install the conduit in this manner from his superior, Vallieres declined to install the same on the grounds that the proposed installation was dangerous (T. 55—A.74). Vallieres advised his superior, in the presence of Quinlan, that the fasteners would not hold the pipe and that they would break. He was aware also that the fasteners could not withstand the bending imposed upon them by any movement of the conduit on the trapeze (T. 72-82—A.89-99). Indeed, the installation was made by Vallieres and Quinlan only after Vallieres was threatened with the loss of his job if he continued to refuse to install the conduit in this manner. As a result of this threat, Vallieres and Quinlan proceeded to install the trapezes in the above manner and to install the conduit on them. Vallieres constructed three of the trapezes and then he and Quinlan attempted to install a twenty foot section of conduit on the trapezes. Each man carried his end of the section up a ladder to place it in the trapezes. Upon questioning by his counsel, Quinlan testified that he slid his end through the trapeze (T. 320-325—A. 281-286). As predicted by Vallieres, the fastener broke and Quinlan was thrown from his ladder injuring his knee.

Plaintiff's expert, Dr. McLay, testified that the accident was caused because the fasteners broke. He further testified that the fasteners broke as either some movement caused the fastener to bend and break or because the adaptors were over twisted or torqued onto the shank of



the fastener during installation.<sup>3</sup> In balance, it seems that all of the evidence in the record suggests that the fastener broke as some lateral force was applied to the end of the stiff trapeze causing a bending force to be transmitted up the rods to the one-sixth of one inch shank of the fastener (T. 127-129, 252-255—A.138-140, 223-226). It also appeared that this bending force was initiated by sliding the conduit on the trapeze or by the force of a man's hand (T. 263, 324—A.231, 285). It was calculated that such forces applied at the bottom of the "frozen trapeze" would result in a stress of between one-half a million and one million pounds per square inch at the one-sixth of an inch shank of the fastener (T. 468—A.375).

It was proven at trial that, in implementing this suspension system, Huva was in clear violation of job specifications prepared by the architect's engineer (T. 135-139—A.146-150). These specifications set forth that all conduit to be hung in air, as was done here, should be hung with Steel City Kindorff fittings. The specifications further required that drawings of all hanger assemblies be submitted for approval to the engineer (T. 437—A.349). This includes the apparatus used to connect the hanger to the beam (T. 437-438—A.349-350). Substitutions from specification were allowed, however, only by the approval of the engineer (T. 439—A.351). Huva neither used the fittings required by the specifications nor submitted his

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<sup>3</sup> Dr. McLay also testified that there was no evidence in the case suggesting that the failure was caused by over tightening or over torquing the adaptors on the fastener shank. He agreed, therefore, that torque was not an actual factor in the case (T. 294—A. 253). More directly, Dr. McLay testified that the suspension system designed by Mr. Huva allowed bending forces to be transmitted to the tiny shank of the fastener (T. 252-254—A. 223-225). This position was neither then nor now disputed by the Defendant.

drawings to the engineer for approval (T. 439—A.351). Huva testified that he used the Hilti fastener and adaptor as it was economic and available (T. 121—A.132). Also, apparently, as he was in a hurry (T. 114-115—A.125-126). The project engineer was called as a defense witness and he testified that he would not have approved the drawings if they were submitted to him. His reason for this, as stated, was the stiff hanger designed by Mr. Huva would create excessive bending stress on the fasteners which were not compensated in the design with some swivel components. The engineer also testified that Hilti fasteners and adaptors could have been used to connect another form of hanger assembly which included a swivel component (T. 40—A.59).

There was abundant evidence throughout the record that many manufacturers, including Steel City Kindorff and many others, market a variety of pipe hanging devices appropriate to the task of suspending heavy rigid conduit (T. 133-134, 392-393, 481-482—A.144-145, 305-306, 331-382). The products of these firms are specified in job specifications as their products are generally accepted as safe methods for suspending conduit (T. 481-482—A.381-382). Many such methods employ a swivel mechanism to keep bending forces from reaching the fastener. Such systems could readily be attached to the work surface by the use of Hilti fasteners and adaptors (T. 457-458—A.367-368). There was ample testimony in the record supporting the proposition that it is common knowledge in the industry that pipe hanging systems must be designed in such a way as to prevent lateral or bending forces from being applied through the system to the fastener (T. 77, 390-393, 440, 451-453—A.94, 303-307, 352, 363-365). Against this background, the injured party attempted to prove that the Defendant-Appellant's pro-



duct was defective within the meaning of Section 402 A of the Restatement of Torts in that there was no adequate warning that one inch long hard steel fasteners would break when bent and that Hilti was negligent for failing to warn its customers that said fasteners would break when bent. Proof in support of either contention in the Plaintiff's case appears, if at all, only in the testimony of his expert witness, Dr. Richard McLay, as the injured party called no other witnesses which gave evidence to support his liability claims.

Dr. McLay referred to the figures indicating allowable load carrying capacity in tension and shear as were shown by Smith to Huva and labeled these as "modes of failure" (T. 182—A.165). He then indicated that two other modes of failure, so-called, are obvious to engineers and designers. He stated that these were bending and torque<sup>4</sup> (T. 183, 185—A.166,168). Dr. McLay testified that bending is "like common-sense", the "pushing down on one side and pulling up on the other" (T. 183—A.166). Despite his reference to "common sense", Dr. McLay testified that, in his opinion, manufacturers of such fasteners should warn that they will break if bent (T. 192-193—A.175-176). He testified that such a warning should be directed to the users of the fasteners and fastening tools (T. 193—A.176). Dr. McLay then testified, over objection, that Hilti could foresee such a use of their product as was made here (T. 195—A.178). He also testified, again over objection, that the absence of a "bending warning", so-called, a user might bend the

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<sup>4</sup> As, on cross-examination, Dr. McLay testified that torque was not a factor in the case, the presentation of his opinion testimony made above omits further reference to his remarks on the torquing mode of failure. See Footnote No. 3, *supra* (T. 183, 185—A. 166, 168).

fastener and cause it to break (T. 196—A.179). Over objection, Dr. McLay testified that the existence of load carrying capacity figures in tension and shear, coupled with the absence of information concerning bending, would tend to "mislead" "untrained" persons<sup>5</sup> (T. 197-198—A.180-181). Dr. McLay also testified, before objection was successfully interposed, that he could, based on his observation of the witnesses, "make a fairly strong statement" that the published large load carrying capacities of the fasteners could and did mislead the users into thinking it could be bent (T. 198—A.181). Dr. McLay ended his testimony by stating that the fastener and adaptor, sold together, were "defective" in that Hilti published no information concerning the bending characteristics of the fastener (T. 201—A.184).

At the time of Dr. McLay's testimony that the product was defective for lack of a warning and that product users were misled by company load carrying capacity figures, only two material witnesses preceded him on the record, that is, Clement Vallieres and Hans Huva.

Huva purchased the product for a use which he alone contemplated (T. 130-131—A.141-142). He testified that he was aware, long before the purchase in question that such fasteners are "brittle" and would break when bent<sup>6</sup>

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<sup>5</sup> In subsequent testimony, Dr. McLay admitted that Huva, the purchaser, and Vallieres, the user, were trained individuals (T. 238—A. 209).

<sup>6</sup> Mr. Huva was called by the Plaintiff to establish the purchase and the fact that he reviewed Company figures on load carrying capacities. Plaintiff's counsel declined to ask Mr. Huva if he knew that the fasteners would break when bent or if he was misled in any way by the load capacity figures. Apparently, as a trial tactic, it was felt that these crucial items could be better implied by the testimony of their expert. Mr. Huva's remarks, cited above are all drawn from his cross-examination.

(T. 123—A.134). He testified that he asked only for load carrying capacities and did not ask about bending characteristics (T. 123—A.134). He was aware, before the purchase, that too large a force would snap the fasteners at their shank (T. 125—A.136). He was aware that the conduit, if pushed on the trapeze, would create a substantial force (T. 125-129—A.136-140). It was simply his hope that the pipe could be installed without the application of any bending force (T. 124—A.135). Mr. Huva was asked directly if he was misled by the load carrying capacity figures and he responded that he was aware that the fasteners would break if bent (T. 131—A.142). He gave clear testimony that he knew that the fasteners would break if bent but hoped to avoid bending during the installation process by the use of "extra care" (T. 132-133—A.143-144). His clear testimony is simply that he knew the fasteners would break if bent and that he was not misled by the load capacity figures. Clement Vallieres, as previously indicated, simply refused to make the installation until threatened with the loss of his job (T. 55—A.74). The connection between Dr. McLay's opinions and this record is most difficult to see.

In addition to the testimony noted above, other testimony in the record, and portions of the cross-examination of Dr. McLay, bear on the issue of whether the Company should have warned against product uses which would impose bending forces on their fasteners.

The Plaintiff and two other witnesses testified that, in their experience, they had never seen conduit hung in the manner as was proposed here (T. 67, 363, 390—A.86, 297, 303). Defense experts testified that it was common knowledge in the industry that such fasteners would break if bent (T. 390-391, 481—A.303-304, 381). The Plaintiff's expert agreed that, in the construction industry, things are designed so that bending forces are not transmitted to the



fasteners (T. 221—A.193). Dr. McLay agreed that, based on the appearance of the fastener alone, one could tell that it would not accept a significant bending load (T. 273—A. 236). Other witnesses testified that no fastener manufacturer, including manufacturers of the common bolt, publish information concerning the bending characteristics of their fasteners (T. 451, 460-461, 466, 479—A. 363, 370-371, 373, 379). Dr. McLay also appeared to agree that no manufacturer known to him warns against bending *per se* (T. 288-290—A.248-246). In short, the record is permeated with testimony indicating that no bending warning of any kind was necessary, and, further, that the product users were fully aware of the bending characteristics of the product.

### ARGUMENT.

**I. The verdict of the jury which found for the Defendant on the issue of whether its products were defective for failure to warn, and against the Defendant on the issue of negligent failure to warn, was inconsistent and fatally defective.**

Throughout the entire trial, only two theories of liability were advanced by the injured party. These theories were summarized by the Court at the opening of the Charge as follows:

"Now, the Plaintiff at this stage of the proceeding asserts a right to recover from the Defendant on two theories of liability. The first is that the Defendant was negligent in failing to exercise reasonable care to inform the Plaintiff's employer of the fact that the fasteners and adaptors sold by the Defendant were dangerous to use when any bending force would be applied to the device.

The second claim is based on what is legally called product liability. The Plaintiff contends that the Defendant is liable on this aspect of the Complaint for manufacturing a defectively dangerous product in that the fasteners as adapted were defective because they were sold without a warning of their inability to withstand any torque or bending forces." (T. 643—A. 13).

At the close of the Charge, the Defendant's attorney objected to the duplicity of these theories and alleged that the Plaintiff must elect between them (T. 681—A. 30).

The case was submitted to the jury with special verdicts and interrogatories (T. 668—A. 28). The first two of these questions, the special verdicts, are stated at length as follows:

"Part A, Products Liability. Is the Defendant, Hilti, Inc., liable to the Plaintiff in the manufacture and sale of the Hilti fasteners and adaptors to the Plaintiff's employer as the Plaintiff has alleged in his complaint.

Part B, Negligence. 1; Do you find that the Defendant was negligent and that this negligence was a proximate cause of the alleged accident." (T. 688—A. 33).

The jury answered the first question in the negative, and, by this verdict, found that the products in question, either sold singularly or in combination, were not defective by the reason of any failure to warn. The jury found for the injured party on the second question, and, thereby found that the Defendant had negligently failed to warn. It is submitted that the answers given to these two questions are wholly inconsistent and that, therefore, the Judgment entered in the action must be reversed. It is argued that the two theories, as presented by the Court in the Charge, are in fact identical and that the rejection of one and the

adoption of the other by the jury is a fatal inconsistency in their verdict.

The Court charged both alleged theories in the terms of reasonableness and foreseeable consequences. In the strict liability portion of the Charge, the Court indicated that the law required the product to be of fair quality and reasonably safe (T. 651—A. 18). The Court further indicated that strict liability would apply only where the seller "had reason to anticipate the danger that might have resulted from a particular use" (T. 652—A. 19). This theme of foreseeability was repeated in several places in the strict liability portion of the Charge (T. 651-653—A. 18-20). Negligence was charged in the classic terms of unreasonable risk of harm and foreseeable consequences<sup>7</sup> (T. 658-659—A. 23-24).

The authorities indicate that there is no difference, significant in this case, which separates the failure to warn theories available in negligence and strict liability. See *Products Defective Because of Inadequate Directions or Warnings*, 23 SW L J 256, where the author notes:

"With many courts adopting the principles of strict liability, the issue arises as to when a product is 'defective and unreasonably dangerous' under section 402A of the *Restatement (Second) of Torts* because not accompanied by adequate warnings or directions. It is said in a comment to the *Restatement* that 'to prevent the product from being unreasonably dangerous, the seller may be required to give directions or warning,

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<sup>7</sup> Some decisions have noted some difference in the two failure to warn theories. See, for example, *Jackson v. Coast Paint and Lacquer Company*, 499 F. 2d 809 (9th Cir. 1974), where the Court noted that the Defendant-Vendor's ability to foresee consequences was not a proper element of a case in strict liability. In any event, the Court below substantially equated the two theories by the terms of its Charge.



on the container, as to its use.' This duty probably is similar to that arising under negligence law, for while 'foreseeability is a standard used to determine fault, . . . it is also an important factor in determining the applicability of section 402A,' when the defectiveness and unreasonable danger of the product for a particular use is being considered.

Since it is also provided in section 402A that a seller incurs liability even though he has exercised 'all possible care,' presumably the duty to warn may arise even though there is no sufficient foreseeability of harm to give rise to such a duty under negligence principles; that is, a lesser degree of risk may be enough to establish a duty to give warnings or directions under strict liability rules."<sup>\*</sup> (23 SW L J 256 at 267) (emphasis added).

See also *Lagorga v. Kroger Co.*, 275 F. Supp. 573 (W.D. Pa. 1967). Other decided cases have also recognized the duality of the theories separately alleged in the proceedings below. In *Brizendine v. Visador Company*, 437 F. 2d 822 (9th Cir. 1970), the Court held that ". . . in so far as a duty to warn is concerned, there is no essential difference in the evaluation of a manufacturer's conduct under strict liability or negligence theories." 437 F. 2d 822 at 825. In *Jacobson v. Colorado Fuel and Iron Corp.*, 409 F.2d 1263 (9th Cir. 1969), the Court completed a discussion of the principles of a negligent failure to warn case and then said: "In addition, it is clear that in the absence of such a warning, the manufacturer/supplier will be found strictly liable in tort for the resultant damages" (emphasis added). In so-called design defect cases, other courts have held that negligence and strict liability raise

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<sup>\*</sup> While the author indicates that some lesser quantum of evidence may support a strict liability case where none for negligence would lie, it is the reverse of this that occurred in the proceedings below.

the same issues, and, therefore, only one cause of action. See *Balido v. Improved Machinery, Inc.*, 29 Cal. App.3d 663, 105 Cal. Rptr. 890 (1973); *Dorsey v. Yoder Company*, 331 F. Supp. 753 (E.D.Pa. 1971). Error has also been found where trial courts have confused the notions of strict liability and negligence in the Charge. See *Eshbach v. W. T. Grant's and Company*, 481 F.2d 940 (3rd Cir. 1973).

As the failure to warn theory, in either strict liability or negligence is the same, and as it was treated as such by the Court below, it is submitted that the verdicts of the jury affirmative in the one case and negative in the other, are inconsistent and defective.

It has often been held that substantial and irreconcilable inconsistencies in jury verdicts are grounds for a new trial. See Moore, Federal Practice, Vol. 6A, sec. 59.08(4). In *Hopkins v. Coen*, 431 F.2d 1055 (6th Cir. 1970), the Court stated:

"By general rule, the granting of a new trial is a matter purely within the discretion of the trial court, and it will not be reviewed. (Citations omitted) However, where verdicts in the same case are inconsistent on their faces, indicating that the jury was either in a state of confusion or abused its power, a motion to alter or amend a judgment, for new trial, or for relief from the judgment, if timely made, is not discretionary." 431 F.2d 1055 at 1059.

Similarly in *Royal Netherlands Steamship Co. v. Strachan Shipping, Co.*, 362 F.2d 691 (5th Cir. 1966) the Court held:

"Where the answers of the jury, upon which the court's judgment depends, are so ambiguous, or so conflicting and inconsistent that they cannot be reconciled, a special verdict will not support a judgment and the cause must be reversed for a new trial." 362 F.2d 691 at 694.



See also *Watkins, et al. v. Myers*, 95 A.2d 705 (N.J. 1953); *King v. Vets Cab*, 295 P.2d 605 (Kan. 1956).

*Turner v. "The Cabins", Tanker, Inc.*, 327 F. Supp. 515 (D. Del. 1971), is a most instructive case. Though the case sounds in principles of admiralty law, nevertheless, it is extremely analogous to the issues presented here. The case involved an injury claim by a seaman based upon claims of negligence and unseaworthiness. The negligence count was directed against alleged acts and omissions by the defendant, and, the unseaworthiness claim related to the condition of the vessel. Both claims were based on the same set of facts. The jury found for the defendant on the seaworthiness issue but against the defendant on the negligence issue. As these findings were based on the same operative facts, the court concluded that the verdicts were irreconcilably inconsistent and ordered a new trial.

It is submitted that the verdicts of the jury proceedings below were also irreconcilably inconsistent, and, that the Court below erred in not granting a new trial.

## **II. The testimony of the Plaintiff's expert exceeded the bounds permitted by law.**

The Plaintiff called Dr. McLay, a professor of mechanical engineering at the University of Vermont as an expert witness (T. 167-168—A. 154-155). Dr. McLay testified that he was present in Court and had listened to the previous testimony in the case<sup>9</sup> (T. 170-171—A. 156-157). The witness testified that he had previously received the Hilti tools, fasteners and adaptors, and that he had

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<sup>9</sup> Certain opinions of the expert and the state of record on which they were based are summarized previously in the Statement of Facts.

reviewed the Hilti instruction manual and load carrying capacity specifications (T. 170-172—A. 156-158). Dr. McLay then testified that he performed a "test", which in fact consisted of reconstructing a "trapeze" to resemble those involved in the accident (T. 171-173—A. 157-159). The expert then estimated the force applied by a worker's hand at 35 pounds and applied this force to the trapeze. The trapeze was pulled back and forth several times until the fasteners broke (T. 174-177—A. 160-163). Dr. McLay testified that the fasteners broke as a result of "low cycle fatigue", and stated that this was similar to what occurs when a paper clip is bent back and forth until it breaks (T. 176—A. 162). Over objection, Dr. McLay testified that Hilti could foresee that its products would be used in a manner which led to the injury (T. 194-196—A. 177-179). He indicated that the seller should realize that its products would be used, ". . . in the typical American way in almost any application you might think of . . ." (T. 195—A. 178). Dr. McLay then noted that the evidence showed that the seller provided the purchaser with specifications for the load carrying capacities of its fasteners in the tension and shear modes (T. 182-185—A. 165-168). Over objection, he was allowed to testify that these figures could mislead "untrained" individuals, which individuals might ". . . assume, that, for example, the capability of bending was very large."<sup>10</sup> (T. 197-198—A. 180-181). He stated that it was his feeling that, ". . . this is what's happened here . . ." (T. 198—A. 181). In effect, Dr. McLay testified, with no support

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<sup>10</sup> Dr. McLay also admitted that the purchaser and user were trained individuals (T. 238—A. 209). The purchaser, Mr. Huva, testified that he was aware that the fasteners were brittle and would break when bent (T. 123-129—A. 134-140).

from the evidence, that Company literature misled product users. The evidence not only does not support this opinion, it opposes it in every material respect (T. 123-129—A. 13-15). It is submitted that the admission of these opinions into evidence was improper and prejudicial to the Defendant. It is further submitted that the Court should have granted a new trial as a result of this error in the admission of evidence.

Expert opinion is admissible only if it serves to assist the jury to determine a fact in issue or to understand the evidence (F.R.E. 702). Opinions offered by experts must be based on facts made known to them at or before the hearing or on certain limited extrinsic facts reasonably relied upon by experts in the particular field (F.R.E. 703). Such opinions must be based upon facts sufficient to support the basis of the opinions. *Federal Trial Handbook*, sec. 62.6. Such opinions are not generally admissible where the subject-matter involves facts and issues readily understandable to jurors of common knowledge and experience. *Tinney v. Crosby*, 112 Vt. 9, 22 A. 2d 145 (1941); *Lucas v. Kelley*, 102 Vt. 173, 147 A. 281 (1929); 31 Am.Jur. 2d, *Expert And Opinion Evidence*, sec. 21. See also the Advisory Committee Note to Federal Rule of Evidence 702 which quotes, Ladd, *Expert Testimony*, 5 Vand. L. Rev. 414, 418 (1952), as follows:

"There is no more certain test for determining when experts may be used than the common-sense inquiry whether the untrained layman would be qualified to determine intelligently and to the best possible degree the particular issue without enlightenment from those having a specialized understanding of the subject involved in the dispute."

In the opinions in question, the expert testified simply that certain general matters could be foreseen by the



Company and that certain information might tend to mislead untrained individuals. It is submitted that these opinions were without foundation in the evidence and that they related to facts and issues so within the common understanding and experience of the jurors that expert testimony could not further assist them.

### **III. The verdict for the Plaintiff and against the Defendant on the issue of negligent failure to warn was against the weight of the evidence.**

In order to take a case to the jury in a negligence action, a plaintiff must introduce substantial evidence which fairly and reasonably tends to support the claim being advanced. *Peterson v. Post*, 119 Vt. 445, 128 A. 2d 668 (1956), where the Court notes:

"We must, in considering this ground of the motion, take the evidence, as we have said many times, in the light most favorable to the plaintiff. We exclude the effect of modifying evidence. Contradictions and contradictory inferences are for the jury. The tendency of the evidence and not its weight is to be considered. But, on the other hand, the evidence supporting the claim must be more than a scintilla. The question is not merely whether there is any evidence to this effect, but whether it is of such a quality and character as to justify a jury, acting reasonably, to predicate a verdict thereon in favor of the party having the burden of proof. Evidence which merely makes it possible for the fact and issue to be as alleged, or which raises a mere conjecture, surmise, or suspicion, is an insufficient foundation for a verdict. The form of expression used in some of our cases is there must be substantial evidence fairly and reasonably tending to support the plaintiff's claim to make a case for the jury." 119 Vt. 445 at 450-451, Citations omitted.

See also *McKirryher v. Yager*, 112 Vt. 336, 24 A.2d 331 (1942); *Wallman v. Wales*, 98 Vt. 437, 129 A. 317 (1925). Where a plaintiff has not produced such evidence to support his claim, then, a Directed Verdict or a Judgment Notwithstanding the Verdict should be granted to the defendant.

The standards applicable to such motions appear to be the same at Vermont and Federal law.

In both Vermont and Federal law, the standards applicable to Motions for Directed Verdicts and Motions for Judgment Notwithstanding Verdicts are the same. *United States v. Simmons*, 346 F.2d 213 (5th Cir. 1965); *Peterson v. Post*, *supra*. Both jurisdictions reject the so-called "scintilla rule". *Hogan v. United States*, 325 F.2d 276 (5th Cir. 1963); *Wallman v. Wales*, *supra*. In *Brady v. Southern Railroad*, 320 U.S. 476, 64 S.Ct. 232 (1943), the Court stated the applicable test as follows:

"Where the evidence is such that without weighing the credibility of the witnesses there can be but one reasonable conclusion as to the verdict, the court should determine the proceeding by non-suit, directed verdict or otherwise in accordance with the applicable practice without submission to the jury, or by judgment notwithstanding the verdict. By such direction of the trial the result is saved from the mischance of speculation over legally unfounded claims." 320 U.S. 476 at 479-480.

See *Peterson v. Post*, *supra*, to the effect that evidence which merely makes the facts alleged possible, or which raises a mere conjecture, surmise, or suspicion, does not constitute a sufficient foundation for a verdict. The party against whom the motion is directed is entitled to have all contradictions and contradictory inferences resolved in his favor. However, there must be evidence in the record

which fairly and reasonably supports the verdict or the Motion should be granted. *Peterson v. Post*, *supra*; *Valente, Guardian v. Commercial Insurance Co.*, 126 Vt. 455, 236 A.2d 241 (1967); *Dindo v. Denton*, 130 Vt. 98, 287 A.2d 546 (1972); Moore, *supra*, Vol. 5A sec 50.02(1). Where the evidence given in the case is actually against the proposition advanced by a plaintiff, a verdict should be directed against him. See *Dyer v. MacDougall*, 201 F.2d 265 (2nd Cir. 1952), where Judge Hand stated:

" . . . Although it is . . . true that in strict theory a party having the affirmative might succeed in convincing a jury of the truth of his allegations in spite of the fact that all the witnesses denied him, we think it plain that a verdict would nevertheless have to be directed against him." 201 F.2d 265 at 269.

The Court below charged the jury that negligence is a failure to use reasonable care which creates an unreasonable risk of harm (T. 658-659—A. 23-24). The Court indicated that the notion of foresight was the foundation of negligence (T. 659—A. 24). The Court charged, in several places, that the seller would be responsible to the injured party where the seller knew that the product was likely to be dangerous for the use supplied and had no reason to know that the product user would realize the dangerous condition, where the seller failed to exercise reasonable care to inform the user of any such dangerous condition (T. 658-661—A. 23-26). The Court also charged that the seller had no duty to warn of the general possibility of danger or of known dangers (T. 683—A. 32). It is submitted that the weight of the evidence in the record does not support the conclusion of the jury that the seller was negligent for failing to warn. Particularly, it is argued that the record clearly shows that the seller could not reasonably foresee that its fasteners would be used to



fasten rigid trapeze pipe hangers to steel beams. Further, it is submitted that the record clearly shows that the product users knew that the fastener would break when bent, and, further, that the trapeze application could result in bending. In short, as no warning was in fact necessary, negligence could not be predicated on the absence of a warning.

As noted, the injured party's expert witness testified, without foundation and over objection, that the product use involved here was foreseeable. No other witness in the case agreed with him, and, further, the evidence does not support his opinion. The overwhelming weight of the evidence suggests that the product use involved here was entirely unforeseeable by the seller. The facts supporting this proposition are collected completely in the Statement of Facts, and, they will be reiterated here only in summary. As noted previously, the products involved, used separately or in combination, are widely used in the construction industry. They could be used in a virtual host of proper and improper ways. A variety of other implements exist in the marketplace which are used to hang heavy rigid conduit. Such implements were specified in the job specifications involved here, and, these specifications were violated by the use of Hilti products in the manner at issue. Expert testimony in the case indicated that, in the construction industry, it is common knowledge that powder actuated fasteners break when bent. Several experienced witnesses testified that they had never seen the method in question employed to hang large rigid conduit. The Plaintiff's expert testified that, as a general rule, things are designed so as to insure that bending forces do not reach the fasteners. Dr. McLay also testified that, from the appearance of the fastener alone, one could see it would not withstand significant bending.

All of these facts and circumstances indicate that the seller could not reasonably foresee that its products would be used in the manner in question.

Neither can foreseeability be found in any advice given to the seller by the purchaser. Huva, the purchaser, contacted Smith, the Hilti representative, relative to the purchase in question (T. 397-399—A. 310-312). Huva purchased steel fasteners and coupling adaptors and asked only for the load carrying capacity of the fasteners. Huva did not advise Smith of the use he intended for the product (T. 130—A. 141). Though he was aware it was available, he did not seek product application assistance of any kind from the seller (T. 131—A. 142). Smith confirmed Huva's testimony and indicated that he was not told of the intended product use and was aware only that the purchaser was going to fasten a stationary object to steel. On cross examination, Smith was compelled to admit that, "Anything was possible" and, therefore, it was "possible" that more discussion between he and the purchaser occurred than he recalled. Surely, evidence is made of sterner stuff. As previously submitted, evidence must be of such a caliber as to make the facts alleged by the party carrying the burden of proof more than simply possible. Evidence must be of sufficient weight and credibility to give rise to more than mere conjecture, surmise or suspicion. *Peterson v. Post, supra*. It is submitted that the great weight of the evidence indicates that the product use in question could not have been foreseen by the seller, and, therefore, the Court below should have granted the seller's Motion for Judgment Notwithstanding the Verdict.

The law clearly supports the position that there is no duty to warn of dangers that are already known to the product purchasers. *Garrett v. Nissen Corp.*, 490 P.2d 1359



(N.M. 1972). This was recognized, at least obliquely, in the Charge (T. 683—A. 32). The weight of the evidence in the record also indicates that the product purchaser knew that the fasteners would break if bent, and, therefore, no warning of any kind was necessary.

As indicated previously, Huva testified that he was aware that the fasteners were brittle and that they would break when bent (T. 123—A. 134). His testimony was that he knew the fasteners would break if bent, but, he hoped to avoid bending during the installation process by the use of "extra care" (T. 132-133—A. 143-144). Similarly, Huva was aware that too large a force would snap the fastener at its shank, and, he was further aware that the conduit itself, if pushed on the trapeze, would create a substantial force (T. 125-129—A. 136-140). In addition, the job mechanic, Clement Vallieres, refused to install the trapeze until he was threatened with the loss of his job (T. 55—A. 74).

It is the clear and overwhelming testimony in the record that the product purchaser and the product user were fully aware that the fasteners would break if bent. As they were fully aware of this, there was no duty to warn of that which they already knew. 63 AmJur 2d, *Products Liability*, sec.51.

It is submitted that no reasonable evidence or inference in the case supports the proposition that a warning was necessary inasmuch as the product users knew of the dangers and risks involved. It is further submitted that, as there is no evidence which would lend lawful support to the claim of negligence, the Court below should have granted a new trial.

**Conclusion.**

For all of the reasons stated hereinbefore, the Defendant-Appellant, Hilti, Inc. respectfully submits that the cause should be reversed and remanded for a new trial.

Respectfully submitted,

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AFFIDAVIT OF SERVICE BY MAIL

State of New York ) RE: Frank A. Quinlan  
County of Genesee ) ss.: V  
City of Batavia ) Hilti, Inc.

Docket No. 75-7514

I, Leslie R. Johnson being  
duly sworn, say: I am over eighteen years of age  
and an employee of the Batavia Times Publishing  
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On the 18 day of December, 1975  
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Burlington, Vermont 05401

at the First Class Post Office in Batavia, New  
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278 College Street, Burlington, Vermont 05401

Leslie R. Johnson

Sworn to before me this

18 day of December, 1975

Patricia A. Lacey

PATRICIA A. LACEY  
NOTARY PUBLIC, State of N.Y., Genesee County  
My Commission Expires March 30, 1977